UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,981	11/29/2001	Kai Albrecht	A-3171	4323

24131 7590 10/21/2004

LERNER AND GREENBERG, PA
P O BOX 2480
HOLLYWOOD, FL 33022-2480

EXAMINER	
PERVEEN, REHANA	
ART UNIT	PAPER NUMBER
2116	

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/997,981	ALBRECHT ET AL.	
	Examiner	Art Unit	
	Rehana Perveen	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

Response to Arguments

Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rubinstein, Patent No. 5,077,686, in view of Barbera et al, Patent No. 5,479,648.

As to claim 10, Rubinstein teaches synchronizing processes running on a central unit and on other units, generating a system clock in the central unit, and providing the system clock to the other units for synchronizing module clocks of the other units (col. 7 lines 9-34).

However, Rubinstein does not expressly teach generating the module clocks in the other units. Rubinstein uses the system clock to come up with the module clocks.

Barbera et al teach generating module clocks independently of the system clock (figure 3, col. 5 lines 31-49).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Rubinstein and Barbera et al because Barbera et al's independent local clock generation would allow the system to switch between the clocks and provide a substantially continuous stream of output clock pulses enabling a fault-tolerant system in case the system clock shuts-down.

As to claim 11, Rubinstein teaches synchronizing the other units to an absolute time at regular intervals (col. 7 lines 9-60).

As to claim 12, Rubinstein teaches applying the module clocks present in the units, which are involved, for processes taking place therein (col. 7 lines 9-60).

As to claim 13, Rubinstein teaches driving down the processes led by the module clocks upon failure of the system clock (col. 7 line 44 – col. 8 line 6).

As to claim 14, Rubinstein teaches adjusting the frequency of one of the module clocks in accordance with an operation being performed thereat (col. 7 lines 9-34).

As to claim 15, Rubinstein teaches determining values of a machine, such as rotational speed, acceleration, and angular position simultaneously with the system clock (col. 7 lines 9-34).

As to claim 16, Rubinstein teaches forwarding the determined values together with the determined instant of time to the other units (col. 7 lines 9-60 and col. 10 lines 10-35).

As to claim 17, Rubinstein teaches determining the values of the machine by a mathematical model in the involved units after the transmission via the central unit for the time-duration until the transmission of the next current values (col. 7 line 44 – col. 8 line 39).

As to claim 18, Rubinstein teaches transmitting an absolute time from a central computer unit to involved computer units after a defined number of subdivided system clocks (col. 7 line 44 – col. 8 line 39).

Claims 1-9 are directed to the system implementing the method of claims 10-18. Rubinstein and Barbera et al, in combination, teach the method as set forth in claims 10-18. Therefore, Rubinstein and Barbera et al, in combination, also teach the system as set forth in claims 1-9.

Claims 1-18 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Rubinstein, Patent No. 5,077,686, in view of Nguyen et al, Patent No. 5,321,698.

As to claim 10, Rubinstein teaches synchronizing processes running on a central unit and on other units, generating a system clock in the central unit, and providing the system clock to the other units for synchronizing module clocks of the other units (col. 7 lines 9-34).

However, Rubinstein does not expressly teach generating the module clocks in the other units. Rubinstein uses the system clock to come up with the module clocks.

Nguyen et al teach generating module clocks independently of the system clock (col. 9 lines 19-24 and col. 11 lines 15-23).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Rubinstein and Nguyen et al because Nguyen et al's independent local clock generation would allow the system to continue operation in case the system clock shuts-off.

As to claim 11, Rubinstein teaches synchronizing the other units to an absolute time at regular intervals (col. 7 lines 9-60).

As to claim 12, Rubinstein teaches applying the module clocks present in the units, which are involved, for processes taking place therein (col. 7 lines 9-60).

As to claim 13, Rubinstein teaches driving down the processes led by the module clocks upon failure of the system clock (col. 7 line 44 – col. 8 line 6).

As to claim 14, Rubinstein teaches adjusting the frequency of one of the module clocks in accordance with an operation being performed thereat (col. 7 lines 9-34).

As to claim 15, Rubinstein teaches determining values of a machine, such as rotational speed, acceleration, and angular position simultaneously with the system clock (col. 7 lines 9-34).

As to claim 16, Rubinstein teaches forwarding the determined values together with the determined instant of time to the other units (col. 7 lines 9-60 and col. 10 lines 10-35).

As to claim 17, Rubinstein teaches determining the values of the machine by a mathematical model in the involved units after the transmission via the central unit for the time-duration until the transmission of the next current values (col. 7 line 44 – col. 8 line 39).

As to claim 18, Rubinstein teaches transmitting an absolute time from a central computer unit to involved computer units after a defined number of subdivided system clocks (col. 7 line 44 – col. 8 line 39).

Claims 1-9 are directed to the system implementing the method of claims 10-18. Rubinstein and Nguyen et al, in combination, teach the method as set forth in claims 10-18. Therefore, Rubinstein and Nguyen et al, in combination, also teach the system as set forth in claims 1-9.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rehana Perveen whose telephone number is 571-272-3676. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on 571-272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rehana Perveen
Primary Patent Examiner
Technology Center 2100